

metal strip. This mechanism prevents the free end 16 from moving relative to the other coils of the reel 10.

Figure 3 depicts an invention-based retaining device 22. It features a lug ring 20, a flat shaft 24, a hook 26 and a latch 28. The inside diameters of the lug ring 20 and the hook 26 are adjusted so that the affixed retaining device snugly accommodates the entire width of the metal strip 12.

Figure 4 shows a reel 10 with ten coils. The markings indicate where the loops extend from the metal strip 12. Loop 14a contains the lug ring 20 to create a shape-mated connection. The hook 26 snaps into loop 14b on a coil other than the one with the free end 16, thus creating the second shape-mated connection. This connection prevents unwinding at the free end 16.

Reference Numerals:

10	reel
12	metal strip
14	loop
16	free end
18	spool
20	ring lug
22	retaining device
24	flat shaft
26	hook
28	latch

Claims

1. Reel (10) comprised of a metal strip (12) with loops (14), in particular a clip reel for use in packaging equipment, having several coils and a free end (16) extending into the direction of the unwinding metal strip (12), and a retaining device (22). The retaining device (20) forms a releasable connection between two points on the metal strip (12), one point close to the free end (16) and another point in a metal

strip segment (12), which is part of a different coil or – if available – a point on the spool (18). The so formed connection secures the reel against unwinding at the free end and is  
**characterized by its shape-mated design.**

2. A reel according to claim 1, characterized by the design of the retaining device (22) as a separate part with two spatially separated functional ends.

3. A reel according to claim 2, characterized by the design of the retaining device with its first end having a lug ring (20), which catches a loop and snugly accommodates the entire width of the metal strip (12), and further characterized by a hook (26) at the second end of the retaining device, which latches into a loop (14) on another metal strip coil (12).

4. A reel according to claim 3 characterized by the design of the hook (26) as a carabiner hook. .

5. A reel according to one of the above claims, characterized by the fact that the retaining device is made entirely of synthetic material.

6. A reel according to claim 5 characterized by the fact that the retaining device (22) is cast as a one-piece part.

7. A retaining device for a reel (10) comprised of a metal strip (12) with loops (14), in particular a clip reel for packaging equipment, having at least three coils and a free end extending into the direction of unwinding, and the retaining device being **characterized by** a flat shaft (24) with a lug ring (20) at one end and a hook (26) at the opposite end.

### Summary

The invention pertains to a reel, which consists of a metal strip with loops, in particular a clip reel for packaging equipment. The reel must have at least three coils with its free end extending into the direction of unwinding. The reel also features a retaining device, which

secures a releasable connection between the free end and another metal strip coil or – if available – a spool, thus preventing that the reel unwinds. The invention-based embodiment proposes a shape-mated connection (Figure 2).